

Energy News

Energy News Summary

In a break from the record of his first term, President Barack Obama vowed in his Inaugural Address to make climate change a prominent policy of his second term. The president has learned from his first term when he and the Democratic Congress failed to pass comprehensive climate legislation. This term Obama will likely target more on what he can do administratively to curb power plant and transportation emissions, and to increase appliance energy efficiency. The administration also seems focused on a campaign to build public support and head off conservative political opposition in a way the administration did not the last time around. But the White House has cautioned activists not to expect full-scale engagement while Congress is focusing on gun control, immigration and the ongoing budget impasse.

Closer to home the State Energy Office released two annual reports: The Fuel Mix Disclosure Report and the 2013 Biennial Energy Report. Links for these reports can be found on page 9. A chart illustrating the sources of the State's electric power is also presented on page 9 and reveals that 73.4% of electricity is sourced from hydropower, followed by coal at 14.2% and natural gas at 7.7%. The 2013 Biennial Energy Report addresses a number of topics including:

- Petroleum and natural gas supply and pricing, with focus on the high and volatile nature of gasoline and diesel prices during 2012,
- A review of several Energy Office projects, such as the Energy Supply Disruption Tracking System and the Completion of the Recovery Act programs.
- Implementation of the 2012 Energy Strategy,
- Presentation of the State's Energy Indicators which presents detailed information on residential, commercial, industrial and transportation related energy consumption and prices (by fuel type),
- An in-depth discussion of natural gas supply, prices, greenhouse gas emissions, and net environmental impacts.

Energy Price Overview

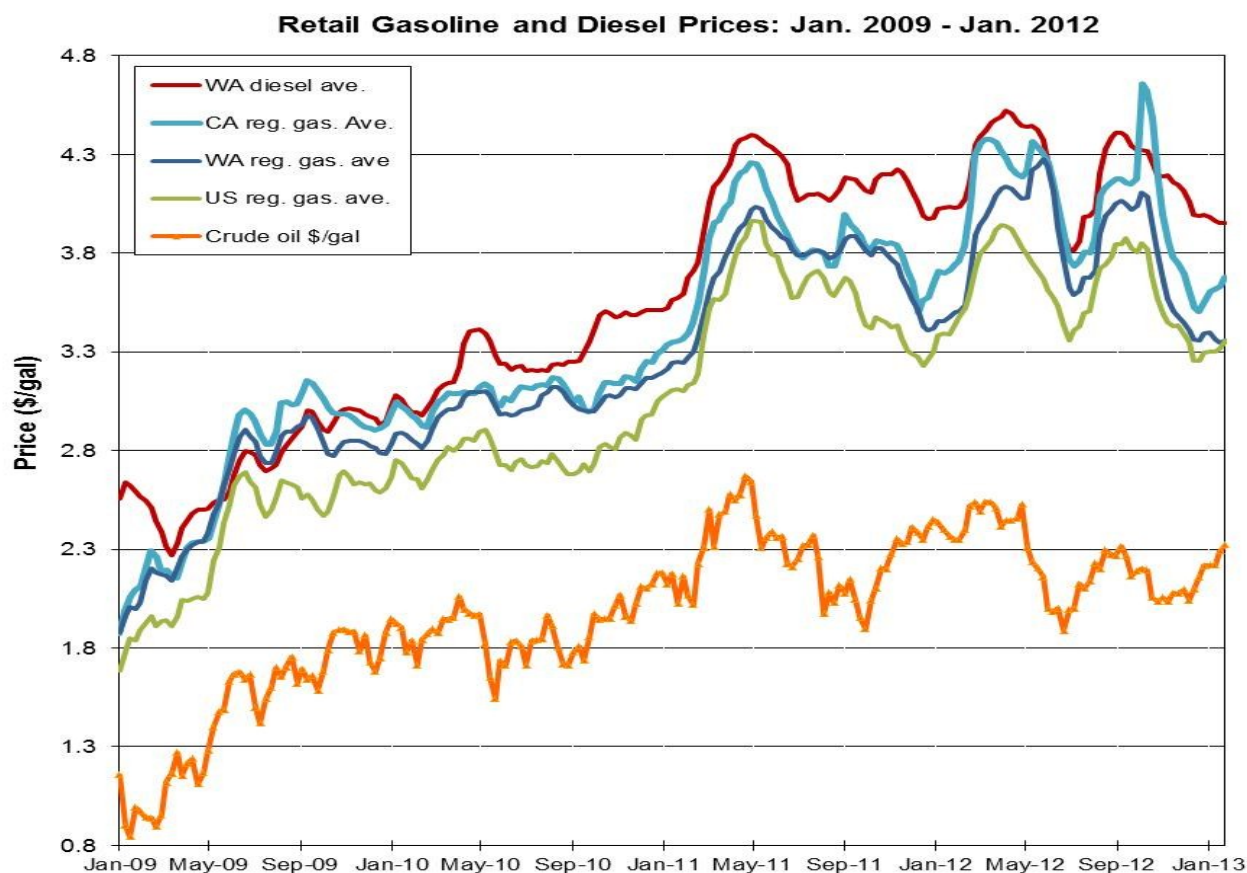
Since the last newsletter, prices for crude oil and some products have increased. The crude oil spot price is up nearly \$10 to \$97.5/barrel as are spot and retail prices for most refined products. NYMEX futures prices are up slightly for heating oil, propane, gasoline, and ethanol. National gasoline and diesel prices are exhibiting a traditional seasonal pattern and have begun to slowly increase: national gasoline average at \$3.36/gal (CA \$3.68), and diesel at \$3.93/gal (CA \$4.14). National prices for gasoline, diesel and jet fuel likely reached their low point in late December. Fuel prices typically increase slowly in January and February, then at a more rapid rate in the spring as demand increases and refiners switch to their low vapor pressure summer blends. The average gasoline price is down 13 cents/gal from last year at this time, while diesel is down 7 cents/gal. This week the state average price was \$3.36/gal, up 2 cents from the last report, while state diesel is \$3.96/gal, up a mere 1 cent.

After rising for two months the NYMEX natural gas price (February delivery) has declined moderately in the face of high storage volumes and mild weather in much of the U.S., and is currently \$3.36/MMBtu. Locally the spot price for gas at Kingsgate is also down: now at 3.27 \$MMBtu, or about 12 cents lower. Due to flat production, natural gas prices should eventually rise if the U.S. has an 'average' winter heating season.

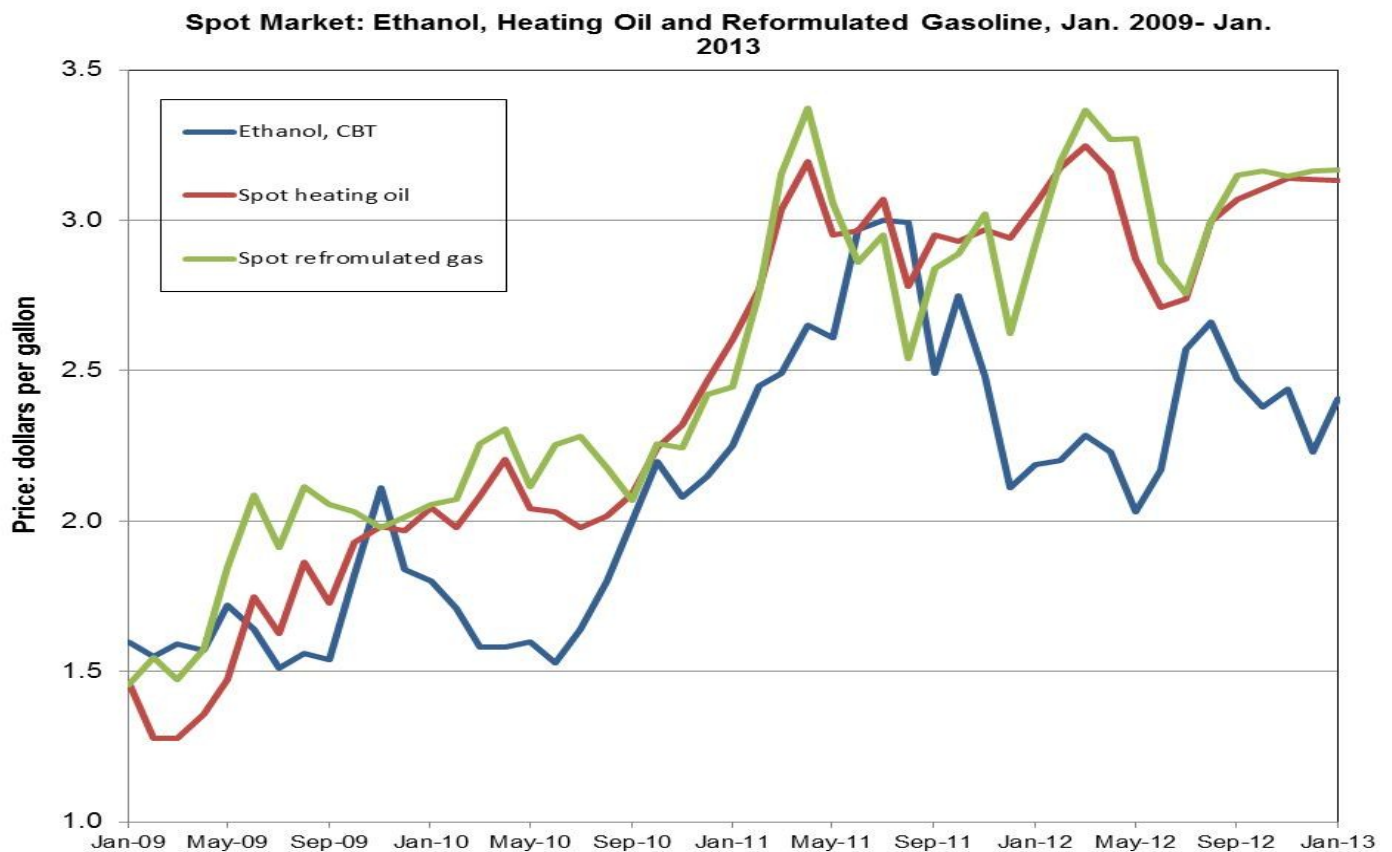
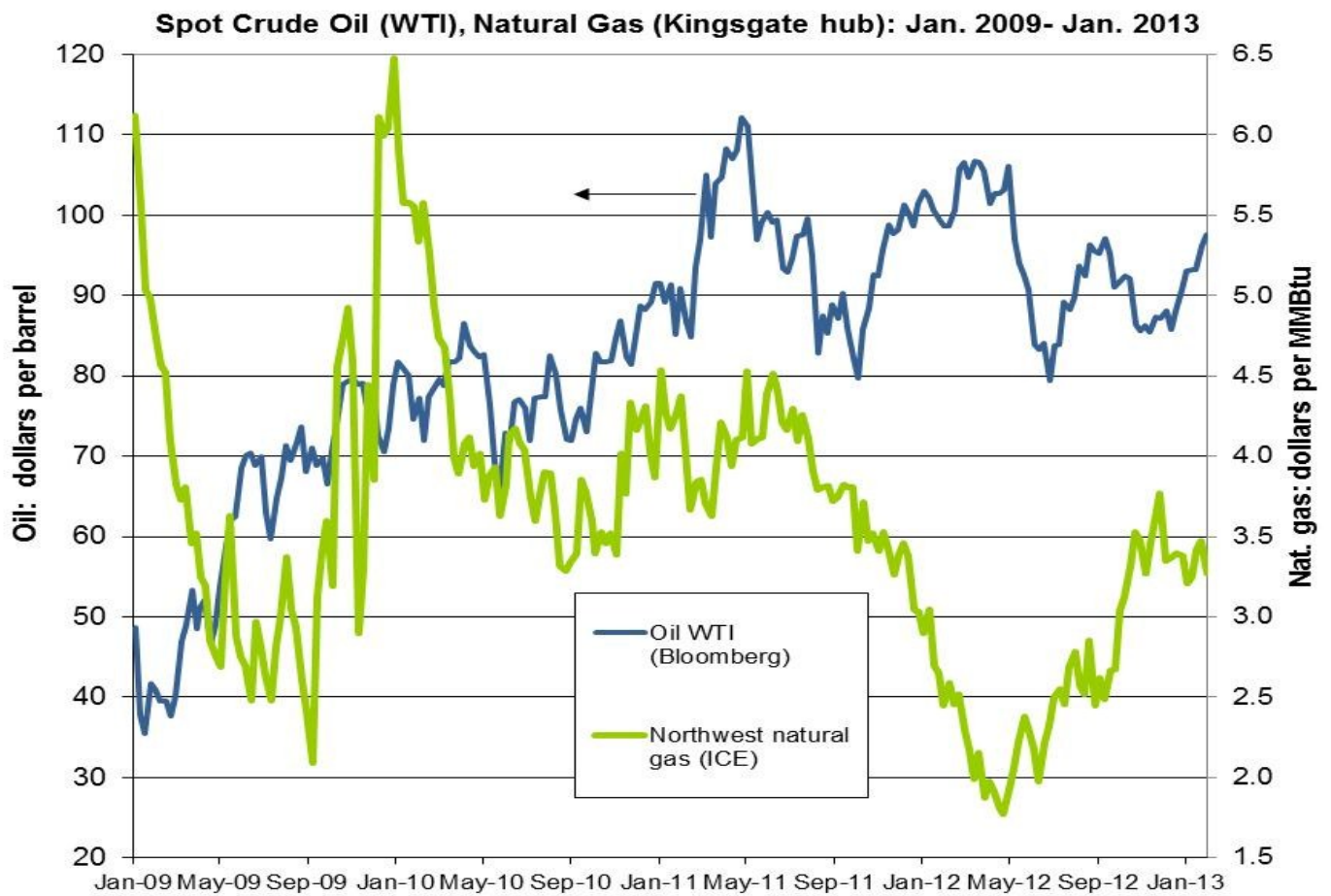
A reported gas storage draw of 172 Bcf last week is fairly typical for this time of year. The national natural gas storage figure is at 2,996 Bcf and is a healthy 12% above the 5-year storage average, perhaps a sign that we haven't started that 'average' winter quite yet.

Regional electricity spot price remained relatively low. Hydropower generation is still plentiful, and demand is relatively typical which keeps spot prices in check. The (four-week) Mid C trading hub (on-peak) price ranged from \$24-38 per MWh, and the average electricity monthly spot market price was \$29.1 per MWh, or \$0.6 per MWh more than the previous report.

Electricity, Petroleum & Natural Gas Prices



Energy Price Summary	Current	Month Ago	Year Ago
Monthly Range at Mid-C (Peak: \$ per MWh)	24-38	20-40	23-28
Average Mid C price (Peak hours \$ MWh)	29.1	28.5	30.3
Electricity WA Retail: Oct. (cents/kWh)	7.04	6.88	6.68
Natural gas spot price (next day: \$ per million BTU)	3.27	3.39	2.45
Natural gas futures (NYMEX next month: \$ per million BTU)	3.36	3.44	3.26
E85 (national average: \$ per gallon gasoline)	4.06	3.99	4.06
Ethanol (CBT next month contract: \$ per gallon)	2.41	2.23	2.11
Corn (\$ per bushel)	7.29	7.01	5.97
Petroleum, West Texas Intermediate: (\$ per barrel)	97.5	88.0	98.6
Seattle gasoline price (\$ per gallon)	3.45	3.39	3.57
Gasoline futures (NYMEX next month: \$ per gallon)	2.79	2.70	2.62
State diesel price (\$ per gallon)	3.96	3.99	4.03
Heating oil futures (NYMEX next month: \$ per gallon)	3.05	3.00	2.93
U.S. residential propane price report (resumes in Oct.)	2.46	2.40	2.87
Clean Cities: Alternative Fuel Price Report, Oct 2012	US Avg current	West Coast last qtr avg	West Coast current qtr
Ethanol E85 (\$ per gas gallon equiv.)	4.89	4.75	5.20
Biodiesel B20 (\$ per diesel gallon equiv.)	4.26	4.12	4.50
Biodiesel B99-100 (\$ per diesel gallon equiv.)	4.83	4.71	4.91
Compressed Natural Gas (\$ per gas gallon equiv.)	2.12	2.24	2.41
Propane (\$ per gas gallon equiv.)	3.53	4.10	3.91



River & Snow Pack Info

- Observed Nov. stream flow at The Dalles: 140% of average.
- Observed Dec. precipitation above The Dalles: 141% of average.
- Forecast runoff at The Dalles: NA.
- Estimate of 2012-13 snow pack: NA.
- Federal hydropower generation in Nov.: 7,577 aMW, 2007-2012 average: 7,007 aMW.
- Reservoir content (Libby, Hungry Horse, Grand Coulee, Dworshak): Nov. 81%, 5-year average: 78%.

Power Exchanged

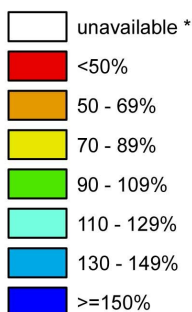
Average flow of power during the last 30 days
(updated on Jan. 29)

- California (exported to) 3,375 MW
- Canada (import from) 301 MW
- Net power exported: 3,074 MW

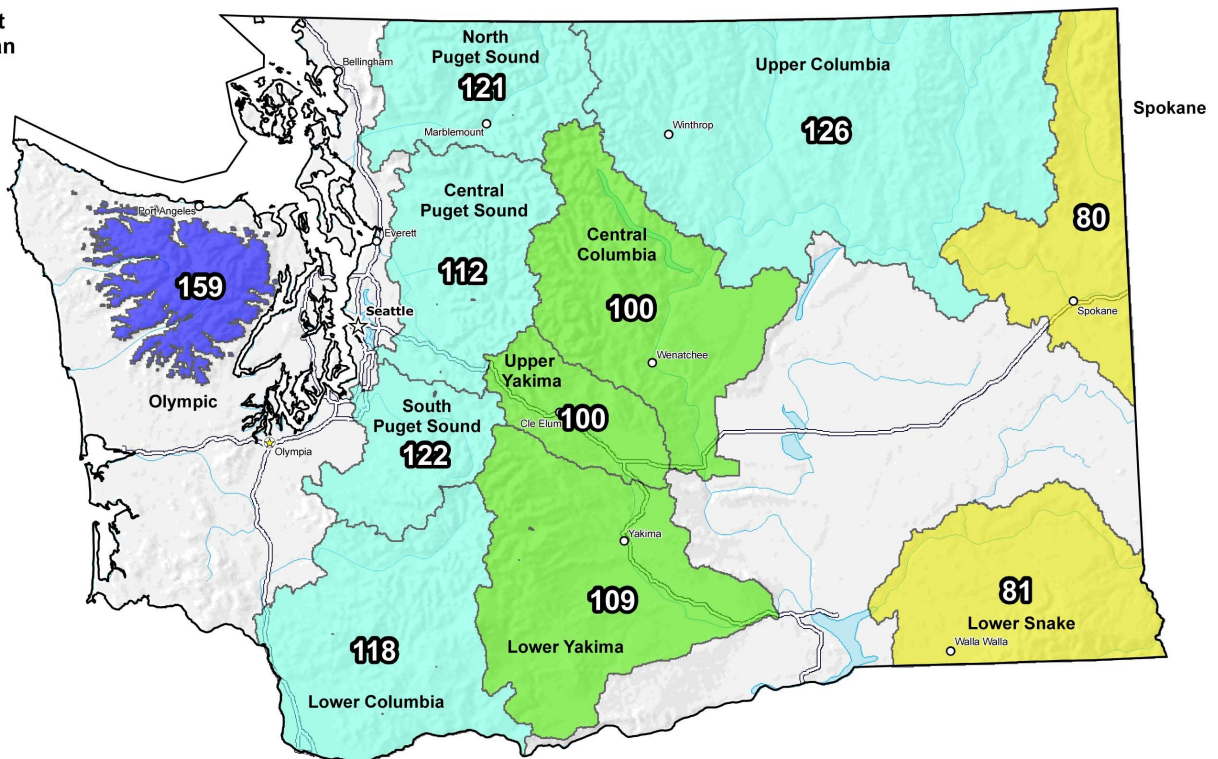
Washington SNOTEL Current Snow Water Equivalent (SWE) % of Normal

Jan 29, 2013

Current Snow Water Equivalent (SWE)
Basin-wide Percent
of 1981-2010 Median



* Data unavailable at time of posting or measurement is not representative at this time of year



Provisional Data
Subject to Revision



The snow water equivalent percent of normal represents the current snow water equivalent found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).

0 10 20 40 60 80 100 Miles

Prepared by the USDA/NRCS National Water and Climate Center
Portland, Oregon <http://www.wcc.nrcs.usda.gov/gis/>
Based on data from <http://www.wcc.nrcs.usda.gov/reports/>
Science contact: Jim.Marron@por.usda.gov 503 414 3047

Energy Headlines -If you only have time to read a few articles—read these.



Speech gives climate goals center stage. New York Times, Jan. 21

http://www.nytimes.com/2013/01/22/us/politics/climate-change-prominent-in-obamas-inaugural-address.html?_r=0

Bonneville Power Administration, The Next 75 Years, Seattle Times, Jan. 29.

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Why Expanded Alternative Energy Increases the Need for Natural Gas. The Energy Collective.

<http://theenergycollective.com/jemillerep/178096/expanded-wind-and-solar-power-increase-need-natural-gas>

Two automakers press the case for electric cars. New York Times, Jan. 16.

http://www.nytimes.com/2013/01/16/business/cadillac-elr-and-cheaper-nissan-leaf-extend-push-into-electric-cars.html?_r=0

Wind Power Still in Limbo Despite Renewed Tax Break. Seattle Times, Jan. 23.

http://seattletimes.com/html/localnews/2020179874_windpowerxml.html?prmid=4939

Jumping aboard North Dakota's oil boom. Tacoma News Tribune, Jan. 27.

<http://www.thenewstribune.com/2013/01/27/2451203/jumping-aboard-north-dakotas-oil.html>

OFFSHORE WIND OUTLOOK

Offshore wind is an
untapped energy resource

for the United States – offering
over **4,000 GW** of electricity
potential, or **four times** the nation's
current total generation capacity.

4 GW

The amount of
installed offshore wind
capacity worldwide

55-75 GW

The predicted amount of offshore
wind capacity to be installed
worldwide by the end of the decade

Energy Headlines continued

Climate Change

Democrats form congressional task force to address climate change. Bloomberg, Jan. 24.

http://www.bloomberg.com/news/2013-01-24/democrats-form-congressional-task-force-to-fight-climate-change.html?utm_source=&utm_medium=email&utm_campaign=5926

Near 100 Percent Chance Pacific NW Summer Flow Reductions by 2050. Columbia Basin Bulletin.

<http://www.cbbulletin.com/424722.aspx>

New study finds that climate change is the culprit in catastrophic wildfires. Seattle Times

http://seattletimes.com/html/localnews/2020208531_barkbeetle.xml.html

Andean Glaciers Melting at 'Unprecedented' Rates. The Guardian, Jan. 23.

<http://www.guardian.co.uk/environment/2013/jan/23/andean-glaciers-melting>

Methane leaks erode green credentials of natural gas. Nature, Jan. 2, 2013.

<http://www.nature.com/news/methane-leaks-erode-green-credentials-of-natural-gas-1.12123>

Renewable Energy and Energy Efficiency

Study a Big Step for Tidal Power in Admiralty Inlet. Everett Herald, Jan. 28. <http://heraldnet.com/article/20130128/NEWS01/701289945>

Federal Court Overturns EPA's Biofuels Mandate. New York Times, Jan. 26. <http://tinyurl.com/acrbvgx>

Arizona Officials Consider Altering Renewable Energy Mandate. Arizona Republic, Jan. 25.

<http://www.azcentral.com/arizonarepublic/business/articles/2013/01/25/20130125officials-consider-altering-mandate.html>

California - Editorial: How Far is Too Far in Promoting Solar? Sacramento Bee, Jan. 27.

<http://www.sacbee.com/2013/01/27/5141865/how-far-is-too-far-in-promoting.html>

Washington State's Snohomish PUD Plans to Install up to 38,000 LED Streetlights. New Streetlights.

http://www.newstreetlights.com/index_files/LED_street_light_news_SnoPUD_project_plans_499.htm

Los Angeles Saves Millions with LED Street Light Deployment. Forbes Magazine, Jan. 25.

<http://www.forbes.com/sites/justingerdes/2013/01/25/los-angeles-saves-millions-with-led-street-light-deployment/>

Oregon - A Quiet Breakthrough in Geothermal Power Tech. GigaOM, Jan. 24.

<http://gigaom.com/2013/01/24/a-quiet-breakthrough-in-geothermal-power-tech/>

Constellation Builds Solar Energy System For Portland General Electric. Electric Light & Power

<http://www.elp.com/articles/2013/01/constellation-builds-solar-energy-system-for-portland-general-el.html>

Cool Job Posting: Earn \$20 Pretending to Hate Wind Energy. Grist Online, Jan.

<http://grist.org/cities/cool-job-posting-earn-20-pretending-to-hate-wind-energy/>

Oregon Tops Nation in New Clean Jobs Index. Sustainable Business Oregon, Jan.

<http://www.sustainablebusinessoregon.com/articles/2013/01/oregon-tops-nation-in-new-clean-jobs.html>

China Is Buying up a Third of the World's Solar Panels. GigaOM, Jan. 22.

<http://gigaom.com/2013/01/22/china-is-buying-up-a-third-of-the-worlds-solar-panels/>

California to Invest \$2.5 Billion to Retrofit Energy-Wasting Schools (Forbes Magazine)

<http://www.forbes.com/sites/justingerdes/2013/01/22/california-to-invest-2-5-billion-to-retrofit-energy-wasting-schools/>

Big Bet on Wyoming Wind: Phil Anschutz's Latest \$9 Billion Idea. Denver Post, Jan. 20.

<http://business-news.thestreet.com/denver-post/story/big-bet-wyoming-wind-phil-anschutzs-latest-9-billion-idea/1>

U-S Installed a Record 13.2 Gigawatts of Wind Energy in 2012. Forbes Magazine, Jan 18.

<http://www.forbes.com/sites/toddwoody/2013/01/18/u-s-installed-record-13-2-gigawatts-of-wind-energy-in-2012/>

Green Power, Biofuels Manufacturer, Fails to Deliver Cash Owed to the Port of Pasco. KNDU-TV.

<http://www.nbcrighnow.com/story/20597869/green-power-fails-to-deliver-to-the-port-of-pasco>

Battery storage system completed at Texas wind farm. Power Engineering, Jan. 24.

<http://www.power-eng.com/articles/2013/january/battery-storage-system-completed-at-texas-wind-farm.html>

Electric Cars and Utilities

'The Electric Car is Not Dead,' Says GM Chief. Christian Science Monitor, Jan. 18.

<http://www.csmonitor.com/Business/In-Gear/2013/0118/The-electric-car-is-not-dead-says-GM-chief>

2013 Nissan LEAF gets massive price cut. Treehugger, Jan. 15.

<http://www.treehugger.com/cars/2013-nissan-leaf-gets-massive-price-cut-6400.html>

Can Electric Cars Be Used As Backup Generators? Christian Science Monitor, Jan. 24.

<http://www.csmonitor.com/Business/In-Gear/2013/0124/Can-electric-cars-be-used-as-backup-generators>

Electric cars lose value quicker than others, but not by much. Green Car Reports, Dec. 17.

http://www.greencarreports.com/news/1081172_electric-cars-lose-value-quicker-than-others-but-not-by-much

Electrical Usage Dropping Nationwide. Albuquerque Business First, Jan.

<http://www.bizjournals.com/albuquerque/blog/morning-edition/2013/01/electrical-usage-dropping-nationwide.html>

Two Billion Dollars - MidAmerican to Buy Two California Solar Power Projects. Associated Press.

<http://www.seattlepi.com/business/article/MidAmerican-to-buy-2-Calif-Solar-power-projects-4161464.php>

Energy Northwest near Richland Has Big Year in 2012. Tri-City Herald, Jan. 24.

<http://www.tri-cityherald.com/2013/01/24/2248503/energy-northwest-near-richland.html>

Recent Reports on Energy and Climate Change

Annual Energy Outlook 2013 Early Release: <http://www.eia.gov/forecasts/aeo/er/>

Environmental Protection Agency 2012 Climate Change Indicators Report.

<http://www.epa.gov/climatechange/science/indicators/>

World Energy Outlook 2012—Summary, International Energy Administration.

<http://www.worldenergyoutlook.org/publications/weo-2012/>

Electricity Storage, Energy Information Administration, July 2012

http://www.eia.gov/todayinenergy/detail.cfm?id=6910#tabs_ElecStorage-1

Oil: The Next Revolution. Belfer Center for Science, Harvard Kennedy School, June 2012

<http://belfercenter.ksg.harvard.edu/publication/22144/oil.html>

Leading Companies Contradict Own Actions on Climate Science. Union of Concerned Scientists, May 2012.

http://www.ucsusa.org/news/press_release/corporate-climate-report-0390.html

Annual Energy Outlook 2012 Early Release. Energy Information Administration, Jan. 2012

<http://www.eia.gov/forecasts/aeo/er/?src=email>

Report on the First Quadrennial Technology Review, US Dept of Energy

<http://energy.gov/downloads/report-first-quadrennial-technology-review>

Understanding Household Preferences for Alternative- Fuel Vehicle Technologies. Mineta Transportation Institute. <http://www.transweb.sjsu.edu/project/2809.html>

Residential Energy Consumption Survey: 2009, Energy Information Administration, Mar 2011.

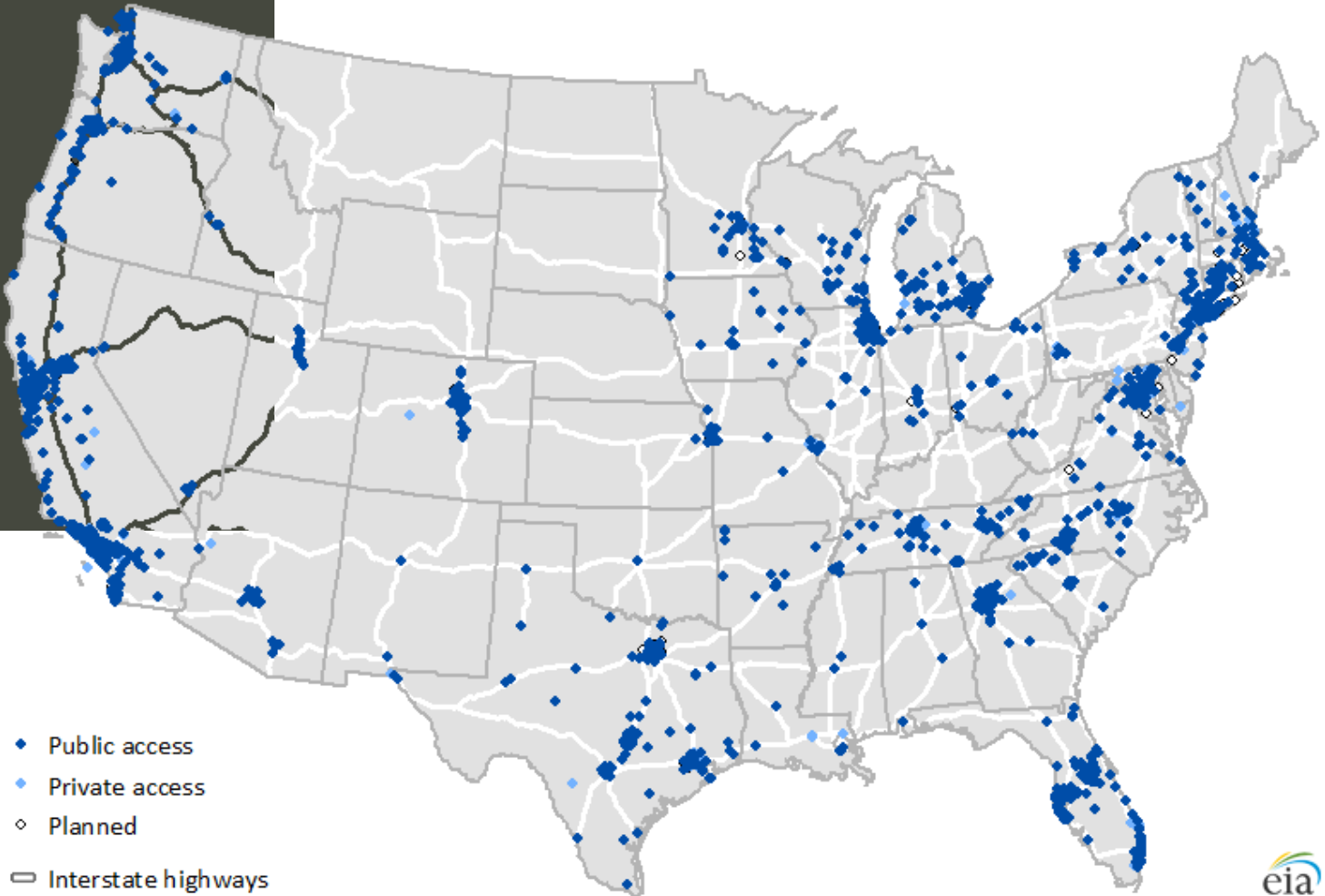
<http://www.eia.doe.gov/consumption/residential/reports/electronics.cfm>

Although every URL is checked for accuracy prior to publication, URLs are subject to change for various reasons.

Alternative Transportation Fuel Stations

The US Energy Information Administration (EIA) has a great set of maps showing alternative transportation fuel stations across the U.S. Included are biodiesel, CNG, Electric, Ethanol (E85), Hydrogen, LNG, and Propane. See them at <http://www.eia.gov/todayinenergy/detail.cfm?id=9350>

Electric Vehicle Charging Stations



Survey of our Readers:

We are considering changes to the newsletter, in format, delivery, and scope.

Please take our survey at <http://www.surveymonkey.com/s/8MPYG8N>



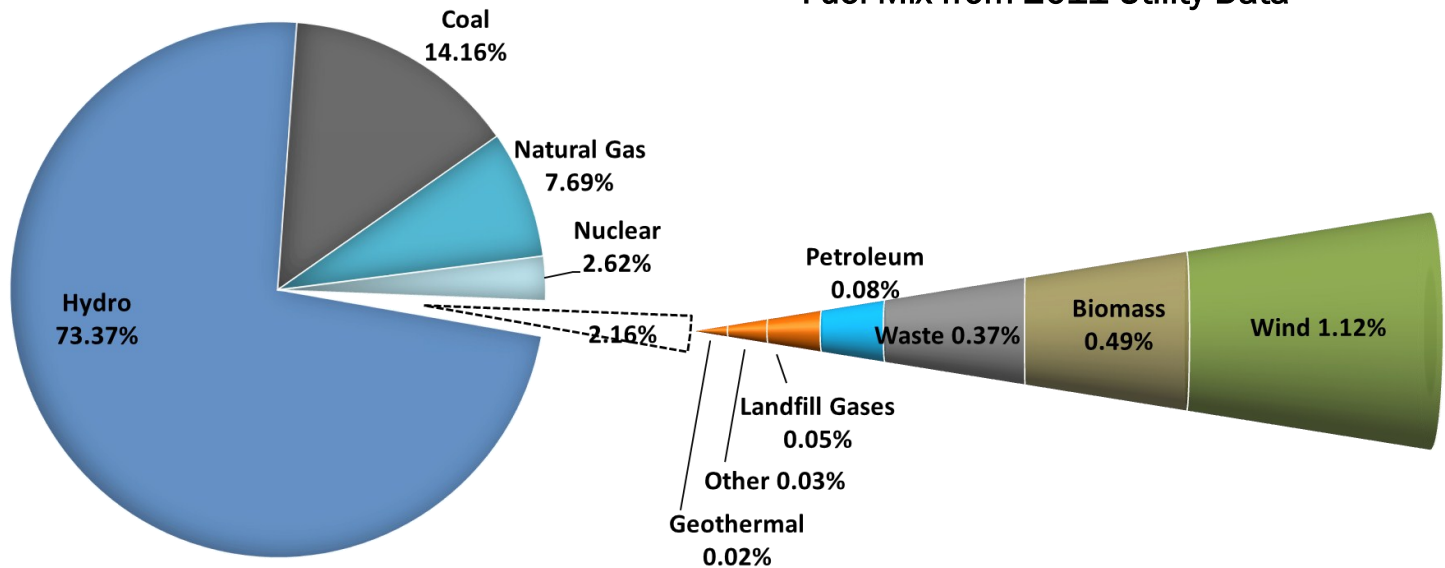
Department of Commerce
Innovation is in our nature.

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Washington State's 2013 Biennial Energy Report

Every two years we provide status of fundamental energy indicators and analysis of emerging issues affecting the Pacific Northwest and its energy economy. This year citizens are concerned about petroleum prices, low-cost natural gas, and the expiration of many tax incentives for progressive energy in the state. You can read the full report at <http://www.commerce.wa.gov/Documents/2013-biennial-energy-report.pdf>

Fuel Mix from 2011 Utility Data



Washington Aggregate Fuel Mix 2011
MWh

Fuel	Market Purchases	Claims on Facilities	Total	Percent
Hydro	7,272,368.24	59,575,028.34	66,847,396.58	73.37%
Coal	5,132,595.69	7,768,040.57	12,900,636.26	14.16%
Natural Gas	1,432,979.08	4,251,243.88	5,684,222.97	6.24%
Nuclear	182,630.48	2,207,614.04	2,390,244.52	2.62%
Cogeneration	0	1,319,054.77	1,319,054.77	1.45%
Wind	0	1,017,701.78	1,017,701.78	1.12%
Biomass	114,180.78	332,708.80	446,889.58	0.49%
Waste	86,353.91	250,593.78	336,947.68	0.37%
Petroleum	53,880.24	14,659.24	68,539.48	0.08%
Landfill Gases	22,006.97	27,202.49	49,209.46	0.05%
Other	17,499.19	9,807.64	27,306.82	0.03%
Geothermal	0	18,107.00	18,107.00	0.02%
Solar	0	15	15	0.00%
Total	14,314,494.57	76,791,777.32	91,106,271.89	100.00%

Fuel Mix in Washington State

The fuel mix report informs customers about fuel sources powering their homes. Every year we work with utilities to collect their purchasing information to combine into a statewide picture of energy sources used in electric generation. In the next few months we'll start the collection process for purchases made in 2012. Data back to 2000 is at <http://www.commerce.wa.gov/Programs/Energy/Office/Utilities/Pages/FuelMix.aspx>

Above is a graph showing the mix from the 2011 data. To left is the corresponding table.